

CLAIMS

1. An article comprising:
 - (a) a low crystallinity layer comprising a low crystallinity polymer;
 - (b) a high crystallinity layer comprising a high crystallinity polymer, wherein said high crystallinity polymer has a melting point as determined by DSC which is at least 25°C higher than that of said low crystallinity polymer;
wherein said high crystallinity layer is capable of undergoing plastic deformation upon elongation.
2. The article of claim 1, wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.
3. The article of claim 2, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.
4. The article of claim 1, wherein the low crystallinity layer further comprises an additional polymer.
5. The article of claim 4, wherein said additional polymer is the same as said high crystallinity polymer.
6. The article of claim 4, wherein said additional polymer is different from said high crystallinity polymer.
7. The article of claim 6, wherein said additional polymer is more crystalline than said low crystallinity polymer.
8. The article of claim 4, wherein said additional polymer is present in an amount of from 2wt% to 30wt%, based on the total weight of said low crystallinity layer.

9. The article of claim 4, wherein said additional polymer is present in an amount of from 5wt% to 20wt%, based on the total weight of said low crystallinity layer.
10. The article of claim 1, wherein said low crystallinity polymer is a copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₂₀ α -olefins, and wherein said one or more comonomers is present in said low crystallinity polymer in an amount of from 2wt% to 25wt%, based on the total weight of said low crystallinity polymer.
11. The article of claim 10, wherein said one or more comonomers is ethylene.
12. The article of claim 1, wherein said low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, and a melting point as determined by DSC of from 25°C to 110°C.
13. The article of claim 12, wherein said low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.
14. The article of claim 1, wherein said low crystallinity polymer has a heat of fusion as determined by DSC of from 3 J/g to 75 J/g.
15. The article of claim 1, wherein said low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.
16. The article of claim 1, wherein said high crystallinity polymer is a homopolymer or copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α -olefins.
17. The article of claim 16, wherein said one or more comonomers is ethylene.

18. The article of claim 3, wherein said high crystallinity polymer is a homopolymer or copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α-olefins.
19. The article of claim 1, wherein said high crystallinity polymer is a random copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α-olefins, and wherein said one or more comonomers is present in said copolymer in an amount of from 2wt% to 9 wt%, based on the total weight of said copolymer.
20. The article of claim 19, wherein said one or more comonomers is ethylene.
21. The article of claim 1, wherein said high crystallinity polymer is a homopolymer or copolymer of ethylene and one or more comonomers selected from C₃-C₂₀ α-olefins.
22. The article of claim 21, wherein said one or more comonomers is present in said copolymer in an amount of from 2wt% to 25wt%, based on the total weight of said copolymer.
23. The article of claim 1, wherein said low crystallinity layer is in contact with said high crystallinity layer.
24. The article of claim 23, wherein said article comprises an additional layer in contact with said high crystallinity layer.
25. The article of claim 23, wherein said article comprises an additional layer in contact with said low crystallinity layer.
26. The article of claim 25, wherein said additional layer is more crystalline than said low crystallinity layer.

27. The article of claim 25, wherein said additional layer is less crystalline than said low crystallinity layer.
28. An article comprising:
 - (a) a low crystallinity layer comprising a low crystallinity polymer; and
 - (b) a plastically deformed high crystallinity layer comprising a high crystallinity polymer, wherein said high crystallinity polymer has a melting point as determined by DSC which is at least 25°C higher than that of said low crystallinity polymer.
29. The article of claim 28, wherein said article has a Haze value of greater than 70%.
30. The article of claim 28, wherein said article has a Haze value of greater than 80%.
31. The article of claim 28, wherein said article has a Haze value of greater than 90%.
32. The article of claim 28, wherein said article has a load loss of less than 70%.
33. The article of claim 28, wherein said article has a load loss of less than 60%.
34. The article of claim 28, wherein said article has a load loss of less than 55%.
35. The article of claim 28, wherein said article has a tension set of less than 20%.

36. The article of claim 28, wherein said article has a tension set of less than 15%.
37. The article of claim 28, wherein said article has a tension set of less than 10%.
38. The article of claim 28, wherein said article is a film having two or more layers.
39. The article of claim 28, wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.
40. The article of claim 39, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.
41. The article of claim 28, wherein the low crystallinity layer further comprises an additional polymer.
42. The article of claim 28, wherein said additional polymer is the same as the high crystallinity polymer.
43. The article of claim 28, wherein said additional polymer is different from the high crystallinity polymer.
44. The article of claim 43, wherein said additional polymer is more crystalline than said low crystallinity polymer.
45. The article of claim 41, wherein said additional polymer is present in an amount of from 2wt% to 30wt%, based on the total weight of said low crystallinity layer.
46. The article of claim 41, wherein said additional polymer is present in an

amount of from 5wt% to 20wt%, based on the total weight of said low crystallinity layer.

47. The article of claim 28, wherein said low crystallinity polymer is a copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₂₀ α -olefins, and wherein said one or more comonomers is present in said low crystallinity polymer in an amount of from 2wt% to 25wt%, based on the total weight of said low crystallinity polymer.

48. The article of claim 47, wherein said one or more comonomers is ethylene.

49. The article of claim 28, wherein said low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, and a melting point as determined by DSC of from 25°C to 110°C.

50. The article of claim 49, wherein said low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.

51. The article of claim 28, wherein said low crystallinity polymer has a heat of fusion as determined by DSC of from 3 J/g to 75 J/g.

52. The article of claim 28, wherein said low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.

53. The article of claim 28, wherein said high crystallinity polymer is a homopolymer or copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α -olefins.

54. The article of claim 39, wherein said high crystallinity polymer is a homopolymer or copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α -olefins.

55. The article of claim 28, wherein said high crystallinity polymer is a random copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α -olefins, and wherein said one or more comonomers is present in said copolymer in an amount of from 2wt% to 9 wt%, based on the total weight of said copolymer.
56. The article of claim 55, wherein said one or more comonomers is ethylene.
57. The article of claim 28, wherein said high crystallinity polymer is a homopolymer or copolymer of ethylene and one or more comonomers selected from C₃-C₂₀ α -olefins.
58. The article of claim 57, wherein said one or more comonomers is present in said copolymer in an amount of from 2wt% to 25wt%, based on the total weight of said copolymer.
59. The article of claim 28, wherein said low crystallinity layer is in contact with said plastically deformed high crystallinity layer.
60. The article of claim 59, wherein said article comprises an additional layer in contact with said plastically deformed high crystallinity layer.
61. The article of claim 59, wherein said article comprises an additional layer in contact with said low crystallinity layer.
62. The article of claim 61, wherein said additional layer is more crystalline than said low crystallinity layer.
63. The article of claim 61, wherein said additional layer is less crystalline than said low crystallinity layer.

64. A garment portion comprising the article of claim 28 adhered to a garment substrate.
65. The garment portion of claim 64, wherein said garment portion is a diaper backsheet.
66. An article comprising:
 - (a) a low crystallinity layer comprising a low crystallinity polymer in contact with
 - (b) a plastically deformed high crystallinity layer comprising a high crystallinity polymer, wherein said high crystallinity polymer has a melting point as determined by DSC which is at least 25°C higher than that of said low crystallinity polymer;
wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.
67. The article of claim 66, wherein said article has a Haze value of greater than 90%.
68. The article of claim 66, wherein said article has a load loss of less than 55%.
69. The article of claim 66, wherein said article has a tension set of less than 10%.
70. The article of claim 66, wherein said article is a film having two or more layers.
71. The article of claim 66, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.

72. The article of claim 66, wherein the low crystallinity layer further comprises an additional polymer in an amount of from 5wt% to 20wt%, based on the total weight of said low crystallinity layer, and wherein said additional polymer is the same as or different from said high crystallinity polymer.
73. The article of claim 66, wherein said low crystallinity polymer is a copolymer of propylene and ethylene, and wherein said ethylene is present in said low crystallinity polymer in an amount of from 2wt% to 25wt%, based on the total weight of said low crystallinity polymer.
74. The article of claim 66, wherein said low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, a melting point as determined by DSC of from 35°C to 70°C, a heat of fusion as determined by DSC of from 3 J/g to 75 J/g, and a molecular weight distribution of from 2.0 to 4.5.
75. The article of claim 66, wherein said high crystallinity polymer is a homopolymer or copolymer of propylene and ethylene, and wherein said ethylene is present in said copolymer in an amount of from 2wt% to 9 wt%, based on the total weight of said copolymer.
76. The article of claim 66, wherein said high crystallinity polymer is a homopolymer or copolymer of ethylene and one or more comonomers selected from C₃-C₂₀ α -olefins, and wherein said one or more comonomers is present in said copolymer in an amount of from 2wt% to 25wt%, based on the total weight of said copolymer.
77. The article of claim 66, wherein said article comprises an additional layer in contact with said plastically deformed high crystallinity layer.

78. The article of claim 66, wherein said article comprises an additional layer in contact with said low crystallinity layer.
79. A process for making an article, said process comprising:
forming an article comprising a low crystallinity layer and a high crystallinity layer, wherein said low crystallinity layer comprises a low crystallinity polymer and said high crystallinity layer comprises a high crystallinity polymer,
wherein said high crystallinity layer is capable of undergoing plastic deformation upon elongation.
80. The process of claim 79, wherein said high crystallinity polymer has a melting point as determined by DSC at least 25°C higher than that of said low crystallinity polymer.
81. The process of claim 80, wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.
82. The process of claim 81, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.
83. The process of claim 81, wherein said forming step comprises coextruding the low crystallinity layer and the high crystallinity layer.
84. The process of claim 81, further comprising orienting said article.
85. A process for making an article, said process comprising:
 - (a) forming an article comprising a low crystallinity layer and a high crystallinity layer, wherein said low crystallinity layer comprises a low crystallinity polymer and said high crystallinity layer comprises a high crystallinity polymer; and

(b) elongating said article such that the high crystallinity layer undergoes plastic deformation.

86. The process of claim 85, wherein said high crystallinity polymer has a melting point as determined by DSC at least 25°C higher than that of said low crystallinity polymer.

87. The process of claim 85, wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.

88. The process of claim 85, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.

89. The process of claim 85, wherein said forming step comprises coextruding the low crystallinity layer and the high crystallinity layer.

90. The process of claim 85, further comprising orienting said article prior to said elongating step.

91. The process of claim 85, wherein said elongating step is performed at a temperature below that of the melting point of the high crystallinity polymer

92. The process of claim 85, wherein said elongating step comprises elongating said article in at least one direction to an elongation of at least 150% of its original length or width.

93. The process of claim 92, wherein said elongation is at least 200%.

94. The process of claim 85, wherein the elongating step comprises elongating the first article in at least one direction to achieve a Δ Haze value of greater than 0%.

95. The process of claim 94, wherein the Δ Haze value is at least 10%.
96. The process of claim 94, wherein the Δ Haze value is at least 25%.
97. The process of claim 94, wherein the Δ Haze value is at least 50%.
98. The process of claim 85, wherein said article has a load loss of less than 70% after said elongating step.
99. The process of claim 85, wherein said article has a load loss of less than 60% after said elongating step.
100. The process of claim 85, wherein said article has a load loss of less than 55% after said elongating step.
101. The process of claim 85, wherein said article has a tension set of less than 20% after said elongating step.
102. The process of claim 85, wherein said article has a tension set of less than 15% after said elongating step.
103. The process of claim 85, wherein said article has a tension set of less than 10% after said elongating step.
104. A process for making a multilayer article, the process comprising:
 - (a) forming a first article comprising a low crystallinity layer in contact with a high crystallinity layer, wherein the low crystallinity layer comprises a low crystallinity polymer and the high crystallinity layer comprises a high crystallinity polymer; and

(b) elongating the first article at a temperature below that of the melting point of the high crystallinity polymer such that the high crystallinity layer undergoes plastic deformation,
wherein the low crystallinity polymer and the high crystallinity polymer have compatible crystallinity, and the high crystallinity polymer has a melting point at least 25°C higher than that of the low crystallinity polymer.

105. The process of claim 104, wherein the multilayer article is a multilayer film.

106. The process of claim 104, wherein the step of forming the first article comprises coextruding the low crystallinity layer and the high crystallinity layer.

107. The process of claim 104, wherein the low crystallinity polymer and high crystallinity polymer have stereoregular polypropylene crystallinity.

108. The process of claim 104, wherein the low crystallinity polymer is a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefins, and combinations thereof, and wherein the comonomer is present in the low crystallinity polymer in an amount of from about 2wt% to about 25wt%.

109. The process of claim 108, wherein the comonomer is ethylene.

110. The process of claim 104, wherein the low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, and a melting point as determined by DSC of from 25°C to 110°C.

111. The process of claim 104, wherein the low crystallinity polymer has a heat of fusion as determined by DSC of from 3 J/g to 75 J/g.

112. The process of claim 104, wherein the low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.

113. The process of claim 104, wherein the low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.

114. The process of claim 104, wherein the high crystallinity polymer is a homopolymer or copolymer of polypropylene with stereoregular propylene sequences.

115. The process of claim 104, wherein the high crystallinity polymer is a random copolymer of propylene and a comonomer selected from ethylene, C₄-C₁₂ α-olefins, and combinations thereof.

116. The process of claim 115, wherein the copolymer comprises 2 to 9% by weight polymerized comonomer based on the weight of the copolymer.

117. The process of claim 116, wherein the comonomer is ethylene.

118. The process of claim 104, wherein the step of elongating comprises elongating the first article in at least one direction to an elongation of at least 150% of its original length or width.

119. The process of claim 118, wherein the elongation is at least 200%.

120. The process of claim 104, wherein the step of elongating comprises elongating the first article in at least one direction to achieve a ΔHaze value of greater than 0%.

121. The process of claim 120, wherein the ΔHaze value is at least 10%.

122. The process of claim 120, wherein the Δ Haze value is at least 25%.
123. The process of claim 120, wherein the Δ Haze value is at least 50%.
124. The process of claim 104, wherein the multilayer article has a load loss of less than 70%.
125. The process of claim 104, wherein the multilayer article has a load loss of less than 60%.
126. The process of claim 104, wherein the multilayer article has a load loss of less than 55%.
127. The process of claim 104, wherein the multilayer article has a tension set of less than 20%.
128. The process of claim 104, wherein the multilayer article has a tension set of less than 15%.
129. The process of claim 104, wherein the multilayer article has a tension set of less than 10%.
130. The process of claim 104, wherein the low crystallinity layer further comprises an additional polymer, wherein the low crystallinity polymer and the additional polymer have compatible crystallinity.
131. The process of claim 130, wherein the low crystallinity polymer is a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefins, and combinations thereof, the additional polymer is a propylene homopolymer or a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefin, and combinations thereof, and wherein the amount of comonomer present in the additional polymer is less than the amount of

comonomer present in the low crystallinity polymer.

132. The process of claim 130, wherein the additional polymer is present in an amount of from 2 to 30% by weight based on the total weight of the low crystallinity layer.

133. The process of claim 130, wherein the additional polymer is present in an amount of from 5 to 20% by weight based on the total weight of the low crystallinity layer.

134. The process of claim 104, wherein the first article further comprises an additional low crystallinity layer in contact with the low crystallinity layer.

135. The process of claim 104, wherein the first article further comprises an additional high crystallinity layer in contact with the low crystallinity layer.

136. A multilayer article formed by the process of claim 104.

137. A process for making a multilayer article, the process comprising:

(a) forming a first article comprising a first low crystallinity layer, a second low crystallinity layer in contact with the first low crystallinity layer, and a high crystallinity layer in contact with the second low crystallinity layer, wherein the first low crystallinity layer comprises a low crystallinity polymer, the second low crystallinity layer comprises the same or a different low crystallinity polymer, and the high crystallinity layer comprises a high crystallinity polymer; and

(b) elongating the first article at a temperature below that of the melting point of the high crystallinity polymer such that the high crystallinity layer undergoes plastic deformation,

wherein the low crystallinity polymers and the high crystallinity polymer have compatible crystallinity, and the high crystallinity polymer

has a melting point at least 25°C higher than that of the low crystallinity polymers.

138. A multilayer article formed by the process of claim 137.
139. A process for making a multilayer article, the process comprising:
 - (a) forming a first article comprising a low crystallinity layer disposed between and in contact with two high crystallinity layers, wherein the low crystallinity layer comprises a low crystallinity polymer, and the high crystallinity layers each comprise a high crystallinity polymer which may be the same or different; and
 - (b) elongating the first article at a temperature below that of the melting point of the high crystallinity polymer such that the high crystallinity layers undergo plastic deformation,
wherein the low crystallinity polymer and the high crystallinity polymers have compatible crystallinity, and the high crystallinity polymers have a melting point at least 25°C higher than that of the low crystallinity polymer.
140. A multilayer article formed by the process of claim 139.
141. A process for making a multilayer article, the process comprising:
 - (a) forming a first article comprising a low crystallinity layer coextruded with a high crystallinity layer, wherein:
 - (i) the low crystallinity layer comprises a low crystallinity copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α-olefins, and combinations thereof, and wherein the comonomer is present in the low crystallinity copolymer in an amount of from about 2wt% to about 25wt%,
 - (ii) and the high crystallinity layer comprises a high crystallinity homopolymer or copolymer of polypropylene

having a melting point at least 25°C higher than that of the low crystallinity copolymer; and

(b) elongating the first article at a temperature below that of the melting point of the high crystallinity copolymer such that the high crystallinity layer undergoes plastic deformation,

wherein the low crystallinity copolymer and the high crystallinity homopolymer or copolymer have compatible stereoregular polypropylene crystallinity.

142. A multilayer article formed by the process of claim 141.

143. A multilayer article comprising:

(a) a low crystallinity layer comprising a low crystallinity polymer in contact with

(b) a plastically deformed high crystallinity layer comprising a high crystallinity polymer,

wherein the low crystallinity polymer and the high crystallinity polymer have compatible crystallinity, and the high crystallinity polymer has a melting point at least 25°C higher than that of the low crystallinity polymer.

144. The article of claim 143, wherein the article is a multilayer film.

145. The article of claim 143, wherein the low crystallinity polymer and high crystallinity polymer have stereoregular polypropylene crystallinity.

146. The article of claim 143, wherein the low crystallinity polymer is a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefins, and combinations thereof, and wherein the comonomer is present in the low crystallinity polymer in an amount of from about 2wt% to about 25wt%.

147. The article of claim 146, wherein the comonomer is ethylene.

148. The article of claim 143, wherein the low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, and a melting point as determined by DSC of from 25°C to 110°C.

149. The article of claim 143, wherein the low crystallinity polymer has a heat of fusion as determined by DSC of from 3 J/g to 75 J/g.

150. The article of claim 143, wherein the low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.

151. The article of claim 143, wherein the low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.

152. The article of claim 143, wherein the high crystallinity polymer is a homopolymer or copolymer of polypropylene with stereoregular propylene sequences.

153. The article of claim 143, wherein the high crystallinity polymer is a random copolymer of propylene and a comonomer selected from ethylene, C₄-C₁₂ α -olefins, and combinations thereof.

154. The article of claim 153, wherein the copolymer comprises 2 to 9% by weight polymerized comonomer based on the weight of the copolymer.

155. The article of claim 154, wherein the comonomer is ethylene.

156. The article of claim 143, wherein the article has a Haze value of greater than 70%.

157. The article of claim 143, wherein the article has a Haze value of greater than 80%.

158. The article of claim 143, wherein the article has a Haze value of greater than 90%.

159. The article of claim 143, wherein the article has a load loss of less than 70%.

160. The article of claim 143, wherein the article has a load loss of less than 60%.

161. The article of claim 143, wherein the article has a load loss of less than 55%.

162. The article of claim 143, wherein the article has a tension set of less than 20%.

163. The article of claim 143, wherein the article has a tension set of less than 15%.

164. The article of claim 143, wherein the article has a tension set of less than 10%.

165. The article of claim 143, wherein the low crystallinity layer further comprises an additional polymer, wherein the low crystallinity polymer and the additional polymer have compatible crystallinity.

166. The article of claim 165, wherein the low crystallinity polymer is a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefins, and combinations thereof, the additional polymer is a propylene homopolymer or a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefin, and combinations thereof, and wherein the amount of comonomer present in the additional polymer is less than the amount of comonomer present in the low crystallinity polymer.

167. The article of claim 165, wherein the additional polymer is present in an amount of from 2 to 30% by weight based on the total weight of the low crystallinity layer.

168. The article of claim 165, wherein the additional polymer is present in an amount of from 5 to 20% by weight based on the total weight of the low crystallinity layer.

169. The article of claim 143, wherein the article further comprises an additional low crystallinity layer in contact with the low crystallinity layer.

170. The article of claim 143, wherein the article further comprises an additional plastically deformed high crystallinity layer in contact with the low crystallinity layer.

171. A garment portion comprising the article of claim 143 adhered to a garment substrate.

172. The garment portion of claim 68, wherein the garment portion is a diaper backsheets.

173. A multilayer article comprising:

(a) a low crystallinity layer comprising a low crystallinity polymer in contact with

(b) a plastically deformed high crystallinity layer comprising a high crystallinity polymer,

wherein the low crystallinity polymer and the high crystallinity polymer have do not have similar crystallinity, and the high crystallinity polymer has a melting point at least 25°C higher than that of the low crystallinity polymer.

174. The article of claim 173, wherein the article is a multilayer film.

175. The article of claim 173, wherein the low crystallinity polymer has stereoregular polypropylene crystallinity and the high crystallinity polymer has ethylene crystallinity.

176. The article of claim 173, wherein the low crystallinity polymer is a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefins, and combinations thereof, and wherein the comonomer is present in the low crystallinity polymer in an amount of from about 2wt% to about 25wt%.

177. The article of claim 176, wherein the comonomer is ethylene.

178. The article of claim 173, wherein the low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, and a melting point as determined by DSC of from 25°C to 110°C.

179. The article of claim 173, wherein the low crystallinity polymer has a heat of fusion as determined by DSC of from 3 J/g to 75 J/g.

180. The article of claim 173, wherein the low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.

181. The article of claim 173, wherein the low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.

182. The article of claim 173, wherein the high crystallinity polymer is a homopolymer or copolymer of ethylene and at least one comonomer selected from C₃-C₂₀ α -olefins, and combinations thereof, and wherein the comonomer is present in the high crystallinity polymer in an amount of from about 2wt% to about 25wt%.

183. The article of claim 182, wherein the comonomer is hexene.

184. The article of claim 173, wherein the article has a Haze value of greater than 70%.

185. The article of claim 173, wherein the article has a Haze value of greater than 80%.

186. The article of claim 173, wherein the article has a Haze value of greater than 90%.

187. The article of claim 173, wherein the article has a load loss of less than 70%.

188. The article of claim 173, wherein the article has a load loss of less than 60%.

189. The article of claim 173, wherein the article has a load loss of less than 55%.

190. The article of claim 173, wherein the article has a tension set of less than 20%.

191. The article of claim 173, wherein the article has a tension set of less than 15%.

192. The article of claim 173, wherein the article has a tension set of less than 10%.

193. The article of claim 173, wherein the low crystallinity layer further comprises an additional polymer, wherein the low crystallinity polymer and the additional polymer have compatible crystallinity.

194. The article of claim 193, wherein the low crystallinity polymer is a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefins, and combinations thereof, the additional polymer is a propylene homopolymer or a copolymer of propylene and at least one comonomer selected from ethylene, C₄-C₂₀ α -olefin, and combinations thereof, and wherein the amount of comonomer present in the additional polymer is less than the amount of comonomer present in the low crystallinity polymer.

195. The article of claim 193, wherein the additional polymer is present in an amount of from 2 to 30% by weight based on the total weight of the low crystallinity layer.

196. The article of claim 193, wherein the additional polymer is present in an amount of from 5 to 20% by weight based on the total weight of the low crystallinity layer.

197. The article of claim 173, wherein the article further comprises an additional low crystallinity layer in contact with the low crystallinity layer.

198. The article of claim 173, wherein the article further comprises an additional plastically deformed high crystallinity layer in contact with the low crystallinity layer.

EP CLAIMS

199. An article comprising:

- (a) a low crystallinity layer comprising a low crystallinity polymer;
- (b) a high crystallinity layer comprising a high crystallinity polymer, wherein said high crystallinity polymer has a melting point as determined by DSC which is at least 25°C higher than that of said low crystallinity polymer;

wherein said high crystallinity layer is capable of undergoing plastic deformation upon elongation.

200. The article of claim 199, wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.

201. The article of claim 200, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.

202. The article of any of the preceding claims, wherein the low crystallinity layer further comprises an additional polymer which is the same or different from the high crystallinity polymer.

203. The article of any of the preceding claims, wherein said additional polymer, if present, is more crystalline than said low crystallinity polymer.

204. The article of any of the preceding claims, wherein said additional polymer, if present, is present in an amount of from 2wt% to 30wt%, preferably 5wt% to 20wt%, based on the total weight of said low crystallinity layer.

205. The article of any of the preceding claims, wherein said low crystallinity polymer is a copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₂₀ α-olefins, preferably said one or more comonomers is ethylene, and wherein said one or more comonomers is

present in said low crystallinity polymer in an amount of from 2wt% to 25wt%, based on the total weight of said low crystallinity polymer.

206. The article of any of the preceding claims, wherein said low crystallinity polymer has a triad tacticity of $\geq 75\%$, a narrow compositional distribution, a melting point as determined by DSC of from 25°C to 110°C, or from 35°C to 70°C, a heat of fusion as determined by DSC of from 3 J/g to 75 J/g, and/or a molecular weight distribution of from 2.0 to 4.5.
207. The article of any of the preceding claims, wherein said high crystallinity polymer is a homopolymer or copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α -olefins, preferably said one or more comonomers is ethylene.
208. The article of any of the preceding claims, wherein said high crystallinity polymer is a homopolymer or copolymer of ethylene and one or more comonomers selected from C₃-C₂₀ α -olefins.
209. The article of any of the preceding claims, wherein said low crystallinity layer is in contact with said high crystallinity layer.
210. The article of any of the preceding claims, wherein said article comprises an additional layer in contact with said high crystallinity layer.
211. The article of any of the preceding claims, wherein said article comprises an additional layer in contact with said low crystallinity layer.
212. The article of any of the preceding claims, wherein said additional layer, if present, is more crystalline than said low crystallinity layer.
213. The article of any of the preceding claims, wherein said additional layer, if present, is less crystalline than said low crystallinity layer.

214. The article of any of the preceding claims wherein said high crystallinity layer is plastically deformed.
215. The article of any of the preceding claims wherein said article has a Haze value of greater than 70%, or greater than 80%, or greater than 90%.
216. The article of any of the preceding claims, wherein said article has a load loss of less than 70%, or less than 60%, or less than 55%.
217. The article of any of the preceding claims, wherein said article has a tension set of less than 20%, or less than 15%, or less than 10%.
218. The article of any of the preceding claims, wherein said article is a film having two or more layers.
219. A garment portion, preferably a diaper backsheet, comprising the article of any of the preceding claims adhered to a garment substrate.
220. A process for making the article of any of the preceding claims, said process comprising:
 - (1) forming said article, and
 - (2) elongating said article.
221. The process of claim 220, wherein said elongating step comprises elongating said article in at least one direction to an elongation of at least 150%, or at least 200%, of its original length or width.
222. The process of claim 220, wherein the elongating step comprises elongating the first article in at least one direction to achieve a Δ Haze value of greater than 0%, or at least 10%, or at least 25%, or at least 50%.